

W E L C O M E

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USNS MERCY is a floating surgical hospital with a mobile, flexible, rapid response capability to provide acute medical care in support of amphibious task forces, Marine Corps, Army, and Air Force elements, forward deployed Navy elements of the fleet and fleet activities.

In support of this mission, the Hospital Ship will accomplish the following:

Receive patients suffering from wounds, disease or non-battle injury;

Provide on-site emergency and recuperative care to patients until they can be returned to duty or evacuated to shore-based hospitals;

Provide a safe, stable, mobile platform for carrying out the assigned mission;

Operate the full medical facility while at sea, day and night, with minimal maintenance and refueling.





USNS Mercy has the largest dedicated helicopter flight deck among all ships in the Navy. From the flight deck, patients can quickly be taken to the casualty reception area for initial triage and stabilization.

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USNS MERCY is designed to support combat operations in wartime and can also support disaster relief efforts in peacetime. To carry out this mission, the ship functions in two operational status phases. The first, Reduced Operating Status (ROS), is maintained while the ship is homeported on the West Coast. During ROS, a cadre crew of 40 military personnel, both medical and non-medical technicians, maintains the Medical Treatment Facility (MTF), its equipment, supplies and administration. The ship's operational readiness is provided by a 21-person Military Sealift Command (MSC) crew. The MSC personnel perform the maintenance and administration associated with operations. In ROS, the ship deploys on a semi-annual basis for training for about seven days.

When mobilization is required, the ship can deploy within five days, augmented by a prepositioned staff located primarily at Naval hospitals on the West Coast, and a 15-day supply of consumables.

At this point, the ship enters its second phase, Full Operating Status (FOS). Once in this status, the MSC crew increases to 70 members and the MTF crew may increase to as many as 1,200 medical and non-medical members. The manning can be tailored to meet the specifics of each individual mission.

When in FOS, the ship can operate up to 60 continuous days, with fueling-at-sea capability which gives the ship flexibility and mobility. The ship is equipped with 12 operating rooms, 500 acute care beds and associated medical support, and 500 light care beds. The aviation facility can be operated on a 24-hour basis to receive and evacuate patients.

The ship may be put in FOS with or without activation of the MTF. During FOS, operational control shifts to the appropriate U.S. Navy Fleet or Area Commander.

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## MILITARY SEALIFT COMMAND (MSC)



The Military Sealift Command (MSC), a powerful arm of the U.S. Navy, maintains over 140 ships capable of rapid sealift of U.S. forces and supplies worldwide in support of strategic projection of power.

Since 1949, MSC has delivered material, petroleum products and personnel overseas to Navy shore-based commands in cargo ships, tankers, passenger ships and other Strategic Sealift vessels. Direct support of fleet units at sea, allowing Navy combatant ships to remain on station for extended periods of time, is performed by MSC's Naval Fleet Auxiliary Force as part of the Navy's total Mobile Logistic Support Force.

MSC today has over 8,500 civil service and military employees and contract mariners, with 4,400 of them in the sea-going ranks.

MSC also oversees special mission ships for research, cable-laying and missile tracking with MSC Special Mission Support Ships.

The newest MSC Special Mission ship is USNS MERCY (T-AH 19), a 1,000-bed hospital ship to provide mobile, flexible, rapid response medical and surgical care for amphibious task forces, Marine Corps, Army and Air Force elements, forward deployed Navy elements of the Fleet, and fleet activities located in areas where hostilities may be imminent.

While pierside or at sea, MSC is responsible for the safety of the ship, external communications, operation and maintenance of all major and auxiliary machinery systems including damage control and refrigeration equipment, flight operations and replenishments, and maintenance and upkeep of the ship except for areas assigned to the Medical Treatment Facility, which is manned by U.S. Navy personnel under the control of the Naval Medical Command.

During Full Operating Status, MSC manning totals approximately 68 civilians or contract mariners. During Reduced Operating Status, MSC manning drops to about 21 personnel.

The Military Sealift Command today is an integral part of the planning for U.S. Navy deploying forces and activities. In wartime, or in case of national emergency, MSC's Strategic Sealift, Naval Fleet Auxiliary Force and Special Mission Ships are augmented with ships from the U.S. Merchant Marine, U.S. Flag fleet ships and other vessels both American and foreign.

Future MSC ships that will increase sealift capability include a second hospital ship, crane ships, oceanographic research ship, and a deep submergence vehicle support ship.

## **MEDICAL TREATMENT FACILITY (MTF)**

USNS MERCY (T-AH 19) Medical Treatment Facility is the largest trauma facility in the United States and offers a spectrum of medical services to satisfy acute medical requirements. Patients would arrive aboard by helicopter or small boat and be taken to a casualty reception area for assessing medical treatment. From there, they would proceed to either surgery or other treatment facilities. Patients would be housed in one of 16 wards.

Core components of the ship's medical services include:

### **SURGICAL FACILITIES**

- 12 Operating Rooms
- 20-bed Recovery Room
- Full Anesthesiology
- Capability to perform:
  - General Surgery
  - Dental Surgery:
    - 2 additional operating rooms
    - 4 treatment rooms
  - Ophthalmic Surgery
  - Cardiac and Thoracic Surgery
  - Ear/Nose/Throat Surgery
  - Obstetrics and Gynecology
  - Urology Surgery
  - Plastic Surgery

### **NON-SURGICAL TREATMENT**

- Internal Medicine
- Psychology
- Dermatology
- Respiratory Therapy

### **TRIAGE**

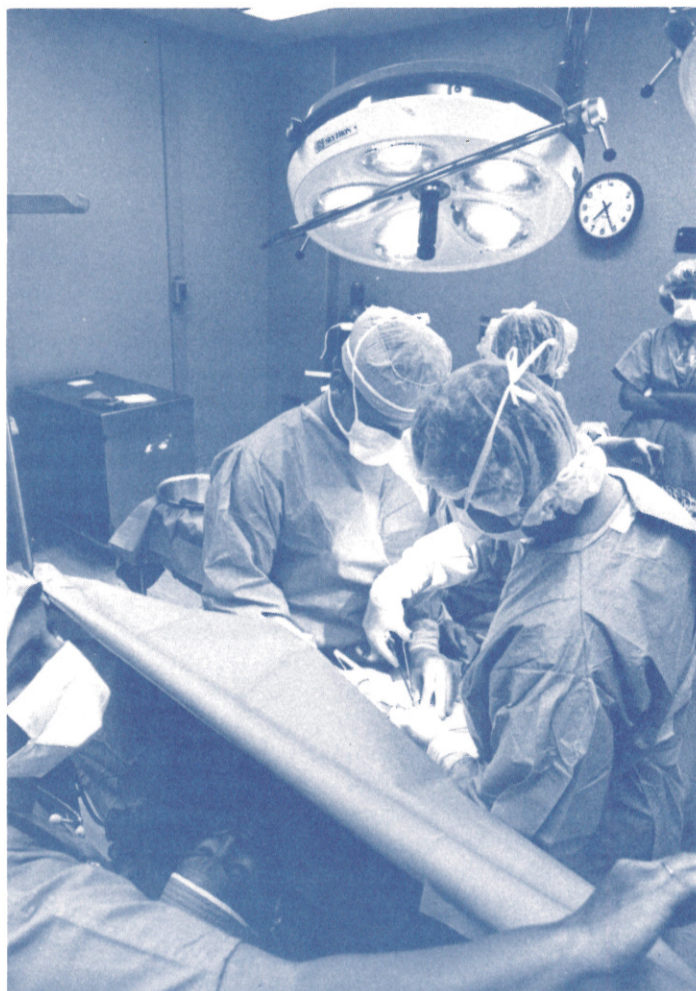
- 50-bed Casualty Reception Area
- 2 Decontamination Units for patients exposed to chemical, biological or radioactive agents

### **SUPPORT SERVICES**

- Prosthetics
- Radiology
- Lens Fabrication
- Pharmacy
- Laboratory
- Blood Bank
- Physical Therapy (for burn patients)
- Medical Equipment Repair
- Medical Supply

### **SPECIAL FEATURES**

- Helicopter Deck to receive patients and supplies
- Patient Lift for receiving patients from small boats
- Oxygen-producing plant
- 9 elevators for patient movement
- Extensive ramping and wide passageways (halls)



During USNS Mercy's four month voyage to the Philippines and the South Pacific in 1987, over 850 surgeries were performed by the medical crew.



## SHIP'S HISTORY

The U.S. Navy's newest hospital ship USNS MERCY (T-AH 19) once carried Mideast crude oil through the Suez Canal and on to the West. But in 1983, the former San Clemente-class 90,000 deadweight-ton tanker SS Worth began undergoing conversion to a 1,000-bed hospital ship.

Not since the Vietnam War had the Navy had an afloat medical capability specifically designed to provide up-to-date medical and surgical care to deployed forces. As a result, the Chief of Naval Operations approved the purchase and construction of two hospital ships (the second ship will be named USNS COMFORT). The quickest and most economical way to provide these ships was through the conversion of existing, relatively new ships.

The tanker, SS Worth, was built in the 1970's by the National Steel and Shipbuilding Co. (NASSCO) in San Diego, and it was NASSCO that was assigned the purchase and conversion contract for the new hospital ships. The first piece of steel was cut on USNS MERCY July 20, 1984. Over 3,000 tons of metal and 13 miles of piping were ripped out of the tanker's interior, leaving only the hull, engine room and bulkheads intact.

Instead of the traditional layering of

new decks and compartments in the ship, NASSCO employed a modern technique in shipbuilding: constructing pre-outfitted blocks or modules complete with piping, ventilation, electrical components and other vital systems. These assembly-line modules, encompassing over 75 per cent of the entire interior construction, were then lowered into the ship's hollowed-out hull with three cranes and welded into place.

More than 10,000 tons of steel were used in placing four deck platforms below the main deck and three above it.

USNS MERCY was launched July 20, 1985, and underwent final design work pierside at NASSCO. She underwent the initial Builders Sea Trial April 5-24, 1986, and her final sea trial was completed in December 1986.

On November 8, 1986, the ship was christened by Helen K. Copley, Chairman and Chief Executive Officer of the Copley Press, Inc., and publisher of *The San Diego Union and Tribune*.

USNS MERCY set sail on her shake-down cruise February 27, 1987, while performing a humanitarian mission to the Republic of the Philippines.

USNS MERCY, the third Navy hospital ship to bear the name MERCY, is homeported in Oakland, California.

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## SHIP'S STATISTICS

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Length Overall .....	894' - 0"
Beam .....	105' - 9"
Draft .....	32' - 9"
Displacement .....	69,360 Long Tons
Speed .....	17.5 knots
Main propulsion type .....	Single screw geared steam turbine
Shaft Horsepower .....	24,500
Endurance (at sustained speed) .....	13,420 nautical miles

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The four month training and humanitarian mission to the Republic of the Philippines in early 1987 was a shakedown cruise designed to train Military Sealift Command mariners and Navy personnel in the operation and support of the ship and its Medical Treatment Facility during extended operations in remote areas. The mission also provided urgently needed medical and preventive medicine support to people in the Philippines, affording training and cultural exchanges for medical personnel of both countries.

An average of 10 days was spent in the following locations: Subic Bay, Luzon (first and last site); Legazpi, Luzon; Davao, Mindanao; Puerto Princessa, Palawan; Cebu City, Cebu; and Calbayog, Samar. The ship also visited the South Pacific ports of Rabaul, Papua New Guinea; and Suva, Fiji.

Advance teams from the ship screened patients prior to the vessel's arrival at each site. For those patients who required minor surgery or testing which could not be accomplished ashore, they were transported to USNS Mercy by boat. A few non-ambulatory patients were transported by helicopter to the ship for care.

The majority of the patients treated were seen ashore by experts in pediatrics, internal medicine, epidemiology, immunology and dentistry who provided state-of-the-art

medical care. In addition, environmental health specialists gave preventive medicine training. The ship's medical crew was composed of active duty and reserve Navy, Army, Air Force and Public Health Service personnel. A team of 55 Philippine armed forces medical personnel accompanied the ship to assist with patient care and act as liaison between U. S. personnel and their Philippine patients.

During the deployment, USNS Mercy steamed over 18,450 miles; performed over 850 surgeries; filled 200,000 prescriptions; and treated more than 63,000 patients.

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A Mercy nurse comforts a young girl who was treated for the repair of her cleft lip during the ship's voyage in the Philippines.

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...USNS MERCY (T-AH 19) is the largest trauma facility in the U.S., both afloat and ashore.

...She is the third largest class of ship in the Navy, after aircraft carriers and helicopter carriers.

...The structure is equivalent to a ten-story building and the distance from the mast to the water line is 124' when the ship is fully loaded.

...The ship is longer than three football fields (894').

...The ship's screw (propeller) weighs 53 tons and is designed to offset a displacement of 39,300 tons of water as the ship moves through the sea.

...The galley (cafeteria) can feed up to 2,500 people in two hours, three times a day, and is the largest in the Navy. The mess deck seats 500 people at a time.

...The helo deck can accommodate the largest helicopter the military uses (CH-53) and can carry two for extended periods of time.

...The 35,000 tons of sea water used to stabilize the ship not only weigh more than the ship itself, but are equal to 89% of the displacement of a fully-loaded Amphibious Assault Ship.

...Each arm of the six red crosses on the sides of the ship is 27' across.

...Distilling plants turn 150,000 gallons of sea water a day into fresh water.

...The laundry facility can clean 56 tons of laundry a week.

...Heat and smoke sensors are located in

every compartment, with a central control to monitor changes in temperature.

...The ship carries eight life boats (two capable of evacuating 105 people and six capable of evacuating 112 people) and 84 life rafts, each capable of evacuating 25 people.

### INTERESTING MEDICAL TRIVIA:

...At any given time, the hospital ship carries \$4.5 million in medical supplies.

...Over 20,000 small medical instruments, from scalpels to operating microscopes, are stocked.

...If you unraveled all the gauze on the ship, it would be about seven miles long.

...Blanket warmers, large medical heating units, are used to warm sheets and blankets for patients and to heat sterile water and medical solutions for surgery.

...The nine elevators on the ship can each carry 25 individuals or six patients on stretchers.

...Oxygen-producing plants take regular air, compress it down, and run it through a refrigeration unit. The unit then separates it into liquid oxygen at -297.3° and liquid nitrogen at -320.5°. The nitrogen is dispensed back to the system and the liquid oxygen is kept in a storage tank where it can be heated to produce pure oxygen for use in the trauma facility.

...Four types of blood are available through the blood bank: refrigerated, frozen, reconstituted, and that supplied by the ship's personnel.

## *PRAYER FROM THE NAVY WOUNDED*

*I am wounded, lying in the tropic of darkness.  
Who will deliver me, oh, God? Is there no HOPE?  
Is there no present SOLACE from the flame that burned me?  
No Heaven-Blessed RELIEF for aching steel-torn flesh?  
Surely the All-Highest in His SANCTUARY,  
He who is my ever-present CONSOLATION,  
My REFUGE who is BENEVOLENT indeed,  
Will send me one SAMARITAN to bind my wounds,  
For I have sung His MERCY long as Christians should,  
Have known Him BOUNTIFUL, yea, my enduring life,  
Have dwelt before Him in old Faith's TRANQUILITY,  
Rescue me, Lord, COMFORT me in my deep stress.  
Salve my wounds, bear me up to some sailor's HAVEN.  
On to the sweet REPOSE that Thou has promised me!*

*Commander J. M. Stuart, USN*

This prayer recognizes U.S. Navy hospital ships, past and present.